

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the present application. Additions to existing claims are identified by underlining. Deletions to existing claims are indicated by ~~strikethrough~~ or ~~[[double brackets]]~~.

1-23 (Cancelled).

24. (Currently Amended) A gateway for use in a telecommunications system having a plurality of diverse paths available for transporting a voice call, one of said paths traversing at least a public switched telephone network (PSTN) having a local line to a subscriber receiving the voice call and a packet-switched data communication network, the gateway being connectable between the packet-switched data communication network and the PSTN, the gateway comprising :

(a) a data network server connectable to the packet-switched data communication network, for receiving through the packet-switched data communication network a request from a calling party to set up a voice call through the PSTN to the local line to the subscriber, and for receiving identification information associated with the calling party through the packet-switched data communication network; and

(b) a telephony platform having a call connection to the PSTN for initiating the voice call through the PSTN to the local line to the subscriber in response to the request from the calling party and having a signaling link for providing call-related signaling information to the PSTN including the identification information associated with the calling party, to enable transport of the calling party identification information through the PSTN to the local line to the subscriber;

~~The gateway of claim 20, wherein the call connection and the signaling link utilize a Feature Group D trunk between the telephony platform and the PSTN.~~

25-29 (Cancelled)

30. (Previously Presented) A method for providing caller identification information for a voice call, originating from a remote calling subscriber device, to a called telephone subscriber line comprising the steps of:

routing an initial voice call, originated by a calling party at the remote calling subscriber device, through a packet switched data network to a gateway that interfaces between the packet switched data network and a public switched telephone network (PSTN);

in response to said routing step, placing a subsequent telephone call from the gateway through the PSTN to the called subscriber line;

linking the initial voice call at the gateway with the subsequent telephone call; and transporting originating calling party identification information from the gateway through the PSTN to the called subscriber line while the called subscriber line is in an on-hook condition.

31. (Previously Presented) The method of claim 30, wherein the step of routing the initial voice call comprises:

routing a telephone call from the remote calling subscriber device through a remote public-switched telephone network (PSTN) to a remote gateway coupled between the packet-switched data network and the remote PSTN; and establishing communications relating to the initial voice call between the gateway and the remote gateway via the public switched data network.

32. (Previously Presented) The method of claim 31, wherein:
the step of establishing communications comprises communicating from the remote gateway an identification of a line of the remote PSTN for the remote calling subscriber device; and
the step of transporting originating calling party identification information is responsive to the identification of the line of the remote PSTN.

33-34 (Cancelled)

35. (Currently Amended) A method for providing caller identification information for a voice call, originating from a remote calling subscriber device, to a called telephone subscriber line comprising the steps of:

receiving a voice call intended for the called telephone subscriber line, originated by a calling party at the remote calling subscriber device through a packet switched data network, handed-off from a gateway that interfaces between the packet switched data network and a public switched telephone network (PSTN);

initiating routing of a telephone call through the PSTN to the called telephone subscriber line for use in completing the voice call to the called telephone subscriber line;

receiving a signaling message containing originating caller identification information from the gateway;
and

transporting the originating caller identification information through the PSTN to the called telephone subscriber line while routing the telephone call through the PSTN;

~~The method as in claim 33,~~ wherein the step of receiving the signaling message comprises receiving the originating caller identification information over a Feature Group D trunk from the gateway.

36-38 (Cancelled)

39. (Previously Presented) A public switched telephone network (PSTN) serving a destination subscriber station, comprising:
a first telephone switching office having at least one link for voice telephone calls and associated signaling to a gateway coupled between the PSTN and a packet switched data network; a second telephone switching office serving a telephone link to the destination subscriber station- and an interconnection between the first and second telephone switching offices, wherein:
the first telephone switching office is adapted to recognize a voice call arriving from the gateway, obtain originating caller identification information from the gateway, and signal the originating caller identification information to the second telephone switching office, and
the second telephone switching office is adapted to attempt to complete a telephone call over the telephone link to the destination subscriber station for the recognized voice call from the gateway, and to transmit the originating caller identification information over said telephone link.
40. (Previously Presented) The public switched telephone network (PSTN) as in claim 39, wherein the interconnection between the first and second telephone switching offices includes an out-of-band signaling network coupled between the first and second telephone switching offices, for transporting the signaling there between.
41. (Previously Presented) The public switched telephone network (PSTN) as in claim 39, wherein the second telephone switching office serves a telephone line connected to the destination subscriber station.
42. (New) A method comprising:
detecting an off-hook condition of a calling station;
subsequent to detecting the off-hook condition, receiving dialed digits from the calling station, the dialed digits indicating a telephone number of a called party;
providing a request to a routing database, the request including at least a portion of the telephone number of the called party;
receiving in response to the request an identity of a gateway to the called party;
sending a first signaling message over a packet-switched data network to the gateway using the identity of the gateway, the first signaling message including the telephone number of the called party and a telephone number of the calling station;
receiving the first signaling message at the gateway;
formulating an SS7 signaling message in response to the first signaling message, the SS7 signaling message including the telephone number of the calling station;
sending the SS7 signaling message from the gateway over a connection to a public switched telephone network (PSTN) system.

43. (New) The method of claim 42, wherein the request includes the telephone number of the calling station.
44. (New) The method of claim 42, wherein the at least a portion of the telephone number of the called party includes an area code of the called party.
45. (New) The method of claim 42, wherein the routing database stores records associating telephone number information with network addresses for corresponding gateways.
46. (New) The method of claim 42, wherein the first signaling message includes a session ID.
47. (New) The method of claim 42, wherein the identity of the gateway is an IP address of the gateway.
48. (New) The method of claim 42, further comprising:
receiving a minimum guaranteed service level for the calling station.
49. (New) The method of claim 42, further comprising:
receiving at the gateway over the connection to the PSTN system an indication that the called party is at least one of busy or available;
when the calling party is indicated busy, sending a second signaling message from the gateway over the packet-switched data network indicating the called party is busy;
when the called party is indicated available, sending a third signaling message from the gateway over the packet-switched network indicating the called party is available.
50. (New) The method of claim 42, wherein the dialed digits further include prefix code indicative of a type of calling.
51. (New) The method of claim 42, further comprising:
translating the at least a portion of the telephone number of the called party into the identity of the gateway using at least one translation table.
52. (New) The method of claim 51 wherein the identity of the gateway includes an IP address of the gateway.

53. (New) The method of claim 42, wherein the connection to the PSTN is a link to a Signal Transfer Point (STP) in the PSTN.
54. (New) The method of claim 42, wherein the connection to the PSTN is a Feature Group D trunk.
55. (New) The method of claim 42, wherein providing the request to the routing database and receiving in response to the request the identity of the gateway to the called party both occur within a single physical device without traversing the packet-switched data network.
56. (New) The method of claim 42, wherein providing the request to the routing database includes sending the request over the packet-switched data network to the routing database, and wherein receiving in response to the request the identity of the gateway to the called party includes receiving a routing response from the routing database over the packet-switched data network, the routing response including the identity of the gateway to the called party.
57. (New) The method of claim 42, wherein the packet-switched data network comprises at least one of wide-area networks, local-area networks, and the Internet.